at least one opto-electrical transducer, each of said at least one opto-electrical transducer connected between one of said nodes and one of said inputs of said logic decision gate wherein the output of said logic decision gate is fed to an electrical input of each said opto-electric transducer;

a signal conditioning circuit arranged between said logical decision gate and the inputs of said nodes in order to provide a pulse shaping function for the output signal of said logical decision gate.

- 4. The data bus arrangement according to claim 3, wherein said signal conditioning circuit modifies the output signal of the decision gate in order to compensate for distortion generated by said opto-electric transducers.
- 5. A method for connecting a plurality of nodes to one another through a data bus configuration, said method comprising the steps of:

routing each of a plurality of outputs from said plurality of nodes to an input of a plurality of inputs of a logic decision gate wherein at least one of said outputted routed signals is fed through an opto-electric transducer to provide an electric signal to at least one input of said logic decision gate;

outputting a signal said logic decision gates and routing said output signal to an input of each of said plurality of nodes;